

It is also another objective of the present invention to provide a fabrication method of phase unification to convert the CLCP film from broadband microchip structure into narrow band planar structure.

It is still another objective of the present invention to provide a thermoplastic polymeric broadband polarizer, which is erasable, re-writable, patternable and laser addressable from broadband to narrow band and vice versa.

It is another objective of the present invention to provide a UV curable thermoset polymeric broadband polarizer, which is high-temperature stable after the broadband microchip structure, being formed by the phase separation, is cured by a UV light initiated polymerization.

It is a further objective of the present invention to provide a single film of CLCP material in which the helical pitch of microchips is varied in three-dimensional distribution through out the CLCP film.

It is another objective of the present invention to provide a silver white or paper white bright painting material which is capable of reflecting ultra violet, visible and infrared wavelengths over a large reflection angle.

It is, once more, another objective of the present invention to provide a cost effective, continuous process for the mass production of the diffusively reflective broadband polarizer film.

BRIEF DESCRIPTION OF THE DRAWINGS

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ATTACHMENT →

FIG. 1 demonstrates a schematic microchip structure of a diffusively reflective circular polarizer.

FIG. 2 demonstrates a group of transmission curves of the diffusively reflective circular polarizer tested by a spectrophotometer.

FIG. 3 demonstrates a group of transmission curves of the left-handed diffusively reflective circular polarizer under a different phase separation condition.

FIG. 4 demonstrates a group of transmission curves of the right-handed diffusively reflective circular polarizer with different coating thickness.

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